AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				ONTRACT ID C $oldsymbol{J}$	ODE	PAGE OF PAGES
2. AMENDMENT/MODIFICATION NO. 0004	3. EFFECTIVE DATE 19 February 2002	4. REQUISITION/PURCHAS	SE REG			NO. (If applicable)
6. ISSUED BY CODE		7. ADMINISTERED BY (If	f other than Item 6) CODE			
U.S. ARMY ENGINEER DISTRICT, ALBU CORPS OF ENGINEERS 3101 JEFFERSON PLAZA, N.E. ALBUQUERQUE, NEW MEXICO 87109-3						
8. NAME AND ADDRESS OF CONTRACTOR (No., street,	county, State and ZIP Code)	<u> </u>	(√)	9A. AMENDM	ENT OF SOLICI	TATION NO.
			×	DACA47-0	2-R-0001	
				9B. DATED (S 16 January		
				10A. MODIFIC NO.	ATION OF CON	TRACTS/ORDER
CODE	FACILITY CODE			10B. DATED	(SEE ITEM 13)	
CODE 11. THIS ITE		AMENDMENTS OF SC	DLICI	TATIONS		
The above numbered solicitation is amended as set tended.	forth in Item 14. The hour	and date specified for receip	ot of C	Offers X is e	xtended,	s not ex-
Offers must acknowledge receipt of this amendment pri	or to the hour and date spec	cified in the solicitation or as	amer	nded, by one o	f the following	methods:
(a) By completing Items 8 and 15, and returning submitted; or (c) By separate letter or telegram which in MENT TO BE RECEIVED AT THE PLACE DESIGNATED FI IN REJECTION OF YOUR OFFER. If by virtue of this ame letter, provided each telegram or letter makes reference	cludes a reference to the so OR THE RECEIPT OF OFFERS ndment you desire to chang	olicitation and amendment nu S PRIOR TO THE HOUR AND e an offer already submitted	umber DAT I, such	s. FAILURE OF E SPECIFIED M n change may l	YOUR ACKNO AY RESULT be made by tele	WLEDG- gram or
12. ACCOUNTING AND APPROPRIATION DATA (If requ	ired)					
		DIFICATIONS OF CON DER NO. AS DESCRIBE			S,	
A. THIS CHANGE ORDER IS ISSUED PURSUANT I	O: (Specify authority) THE C	CHANGES SET FORTH IN ITE	M 14	ARE MADE IN	THE CON-	
B. THE ABOVE NUMBERED CONTRACT/ORDER IS appropriation date, etc.) SET FORTH IN ITEM 14			GES (:	such as changes	in paying office,	
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED	) INTO PURSUANT TO AUT	HORITY OF:				
D. OTHER (Specify type of modification and authority)						
E. IMPORTANT: Contractor is not,	is required to sign	this document and ret	turn	с	opies to the	issuing office.
14. DESCRIPTION OF AMENDMENT/MODIFICATION (O)	ganized by UCF section heading	gs, including solicitation/contrac	ct sub	ject matter where	e feasible.)	
PROJECT: FY02 MEDICAL CLINIC ALT	ERATION, HOLLOM	AN AIR FORCE BAS	E, A	LAMOGOF	RDO, NEW	MEXICO
1. This is Amendment No. 4 to Solicitation I into the specifications. All other provisions s	No. DACA47-02-R-00 hall remain unchanged	01; 16 January 2002.	The	following re	evisions shall	be incorporated
Except as provided herein, all terms and conditions of the and effect.	e document referenced in It	em 9A or 10A, as heretofore	e char	nged, remains i	unchanged and	in full force
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF	CON	TRACTING OF	FICER (Type or	orint)
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF A	AMER	tCA		16C. DATE SIGNED
(Signature of person authorized to sign)	<del></del>	BY (Signature	of C	ontracting Offic	cer)	1

DACA47-02-R-0001 Amendment No. 4 Page 2

- 2. SOLICITATION, OFFER, AND AWARD, Standard Form 1442: In Block 13A, change the date for receipt of proposals from "2/22/02" to "2/28/02".
- 3. SPECIFICATIONS: Delete the following listed pages and substitute the pages attached hereto. On the revised pages, for convenience, changes are emphasized by the amendment number in parentheses before and after changes from the previous issue. All portions of the revised (or new) pages shall apply whether or not changes have been indicated.

Delete Page

Insert Page

16720-5

16720-1 thru 16720-6

//////LAST ITEM//////

SECTION 16720

## TELEPHONE EQUIPMENT

09/99

#### PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. DEFENSE COMMUNICATIONS AGENCY (DCA)

DCA DCAC 370-V175-6

Basic System Interface Criteria

U.S. FEDERAL COMMUNICATIONS COMMISSION (FCC)

FCC Part 68

(1986) Rules and Regulations: Connection of Terminal Equipment to the Telephone Network

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70

(1999) National Electrical Code

U.S. DEPARTMENT OF AGRICULTURE (USDA)

RUS 345-165

(1989) Digital Stored Program Controlled Central Office Equipment (Form 522)

# 1.2 SYSTEM DESCRIPTION

Telephone equipment shall consist of voice switching equipment, voice instruments, power equipment and batteries, telephone management system, and other auxiliary equipment. System shall be connected via base dial central office (DCO) to public switched network in accordance with the rules set forth by FCC Part 68, and other appropriate authorities such as Public Utilities Commission and local telephone company.

#### 1.3 SUBMITTALS

Submit the following in accordance with Section 01330, "Submittal Procedures."

SD-02 Shop Drawings

Telephone equipment installation drawings

SD-03 Product Data

Switching system

Instruments

SD-06 Test Reports

Test procedures and reports

Test plans; G

SD-07 Certificates

Installer's qualifications; G

Instructor's qualifications; G

SD-08 Manufacturer's Instructions

Installation procedures; G

SD-10 Operation and Maintenance Data

Telephone equipment, Data Package 5

Submit operation and maintenance data in accordance with Section 01730, "Operation and Maintenance Instructions".

## 1.4 QUALITY ASSURANCE

# 1.4.1 Evidence of Experience and Qualifications

# 1.4.1.1 Installer's Qualifications

Show that the installer who will perform the work has a minimum of 2 years experience successfully installing telephone distribution system of the same type and design as specified herein. Include the names, locations, and point of contact of at least two installations of the same type and design as specified herein where the installer has installed such systems. Indicate type of each system and certify that system has performed satisfactorily in the manner intended for a period of not less than 12 months. Submit data of installer's experience and qualifications.

# 1.4.1.2 Instructor's Qualifications

Show that the instructor, who will train operation and maintenance personnel, has a minimum of 24 hours training from a recognized technical organization, and 2 years experience in installation of telephone distribution system of the type specified. Submit data of the instructor's experience and qualifications.

## 1.4.2 Telephone Equipment Installation Drawings

Submit shop drawing complete with wiring and schematic diagrams, and other details required to demonstrate that system has been coordinated and will properly function as a unit. Drawings shall show proposed layout and anchorage of equipment and appurtenances, equipment relationship to other parts of the work including clearances for operations and maintenance, and terminal assignment of inside wiring.

## 1.4.3 Test Plans

Submit for approval at least 30 days prior to commencement of formal operational testing a test plans specified in paragraph entitled "Field Quality Control."

## 1.4.4 Installation Procedures

Where installation procedures, or any part thereof, are required to be in accordance with manufacturer's instructions, submit these instructions to the Contracting Officer prior to installation of the equipment.

#### 1.5 DELIVERY AND STORAGE

Provide protection from weather, humidity and temperature variations, dirt, dust, and other contaminants for equipment placed in storage.

## 1.6 SITE CONDITIONS

## 1.6.1 Environmental Requirements

Install equipment indoors in a protected environment. Electronic equipment designed for office environment shall be rated for continuous operation under ambient environmental conditions of 50 degrees F to 85 degrees F and 35 to 65 percent relative humidity, noncondensing.

#### PART 2 PRODUCTS

# 2.1 MATERIALS AND EQUIPMENT

Material and equipment shall be the standard products of a manufacturer regularly engaged in manufacture of the products and shall be the manufacturer's latest standard design.

## 2.2 SWITCHING SYSTEM

Existing EON Communications Corporation SDP1000 switch shall be modified and expanded for this project. Provide all necessary station cards, trunk cards, shelves, software, etc., for a complete and operational system.

# 2.3 HARDWARE REQUIREMENTS

## 2.3.1 Numbering Plan

Provide a flexible numbering plan that will allow for numbers to be changed via terminal interface. Numbering plan for the system shall consist of seven-digit numbers.

## 2.3.1.1 Dialing Plan

Assign DID stations with seven-digit numbers for public directory lists. Calls within the system shall be accessed by dialing the last three or four digits of the listed station number. Calls to stations outside the system shall be completed by dialing [an access code and then] the published number, such as four digits for base calls, seven digits for off-base local calls, FTS, and Autovon, or ten digits for Direct Distance Dialing (DDD) calls.

#### 2.3.1.2 Translation Functions

System software shall have the capability to prefix at least three digits or delete at least three digits from the originating and terminating trunk.

#### 2.3.1.3 Subscriber Data Base

Contractor shall gather, develop, and load the subscriber data base. Assignment of class of service and associated features and capabilities shall be subject to approval by the Contracting Officer.

#### 2.4 STATION LINE CORD

FCC Part 68, modular between station jack and base of instrument, at least 6 feet in length.

# 2.5 INSTRUMENTS

## 2.5.1 Electronic

Voice instrument shall be equipped with 30 programmable keys, which may be independently programmed as feature or line appearance keys. Instrument shall utilize a maximum of four pairs and shall not require any intermediate hardware between the set and EPABX. Instrument shall have 2-line LCD display.

## 2.5.2 Attendant Console

Each console shall utilize construction technology of the same state -of-art of the EPABX and shall operate up to 1000 feet from the EPABX as well as individually or in parallel with adjacent consoles. Provide 4-line LCD display 38 programmable key unit with handset and headset with each attendant console.

# 2.5.3 Speakerphone

Integrated speakerphone shall provide for on-hook, hands free, two-way conversation for users at least 10 feet away from the instrument. Instrument shall be equipped with 12 programmable buttons and 2-line LCD display.

#### 2.5.4 Single Line

Single line phone shall be equipped with 12 programmable buttons, speaker phone, LED indicators.

# 2.5.5 Instrument Requirements

The following instruments shall be provided:

<u>Quantity</u>	<u>Description</u>
53	Single line - desk
6	Single line - wall
5	Electronic - desk
2	Attendant Console
7	Wall speakerphone
59	Desk speakerphone

## PART 3 EXECUTION

## 3.1 INSTALLATION

Install system components and appurtenances in accordance with manufacturer's instructions and NFPA 70. Provide necessary interconnections, services, and adjustments required for a complete and operable telephone distribution system.

## 3.2 INTERIOR WIRING

Install interior electrical work for telephone distribution system as specified in Section 16415, "Electrical Work, Interior."

#### 3.3 GROUNDING

Provide copper ground bus for equipment ground. Total ground resistance shall be 5 ohms or less.

## 3.4 FIELD QUALITY CONTROL

Furnish test equipment, instrumentation, personnel, and supplies necessary to perform all testing. Contracting Officer shall be given 5 working days notice prior to each test.

## 3.4.1 Test Plans

Develop a test plans defining all tests required to ensure that system meets technical, operational, and performance specifications. Plans shall define milestones for each test, equipment, personnel, facilities, and supplies required. Plans shall identify the capabilities and functions to be tested.

# 3.4.2 Test Procedures and Reports

Develop test procedures from the test plan and design documentation. Procedures shall consist of detailed instructions for the best setup, execution, and evaluation of the tests. Procedures shall consist of visual inspection, basic system operation, trunk call-through, station feature operations, attendant console verification, and maintenance and administrative operations. Visual operations can begin at any period during installation and are used to list all newly installed equipment. Submit reports to the Contracting Officer within 7 working days after completion of each test.

## 3.4.2.1 Basic System Tests

Tests shall verify that basic types calls can be made and to ensure confidence in system operations. Selected lines shall be verified to receive dial tone, receive ringback tone, talk to the called line, receive ringing, and trip ringing as required.

# 3.4.2.2 Trunk Call-Through Tests

Verify all trunk groups can be accessed as required, and that trunks interface properly with connecting system.

## 3.4.2.3 Station Feature Tests

Verify that the equipped station and system features function as required. Tests require the use of several telephones with each being assigned classes of service to verify the appropriate feature.

# 3.4.2.4 Attendant Feature Tests

Verify that all attendant features function as required. Tests require that several calls be placed to and from attendant console from local stations, to attendant console from incoming trunks, and from attendant console to outgoing trunks.

# 3.4.2.5 Maintenance and Administrative Tests

Verify that all maintenance and administrative operations can be accomplished as specified.

-- End Of Section --